

## CLAIMS

What is claimed is:

1. A portable imaging system, comprising:  
a sensor having a plurality of pixels; and  
an optical system that maps the plurality of pixels to an object field of view, the plurality of pixels are scaled to about a size of a diffraction-limited spot defined by the optical system.
2. The system of claim 1, further comprising an excitation source including at least one of a light source, and a Luxeon Star.
3. The system of claim 1, further comprising an enclosure for the optical system and the sensor.
4. The system of claim 1, further comprising a processor or computer that is adapted for at least one of operation within the enclosure and operation external to the enclosure in order to facilitate image generation.
5. The system of claim 2, further comprising a holographic element to facilitate generation of an image.
6. The system of claim 1, the optical system and the sensor are associated with a digital camera.
7. The system of claim 1, the sensor is adapted for at least red, green, blue, and at least one other color.

8. The system of claim 1, the optical system and sensor are employed in at least one of a remote medicine application and an industrial application.
9. The system of claim 1, further comprising at least one of an objective turret, a manual or automatic adjustment, an iris control, a projection module, and an illumination module.
10. The system of claim 1, further comprising at least one of an AC or DC power supply.
11. The system of claim 1, further comprising a port for transferring digital images between locations or devices..
12. The system of claim 11, the port is associated with at least one of a parallel port, a wireless port, a printer port, a USB port, and a Firewire port..
13. A digital camera, comprising:
  - a sensor having a plurality of pixels; and
  - a lens configuration that maps the plurality of pixels to an object field of view, the plurality of pixels are correlated to about a size of a diffraction-limited spot defined by the lens configuration.
14. The digital camera of claim 13; the pixels are associated with at least four colors.
15. A microscopic imaging system, comprising:
  - a light source to illuminate a specimen;
  - a diffuser associated with the light source;
  - an optical medium to magnify the specimen; and
  - a sensor having a plurality of pixels for receiving light from the specimen in accordance with the optical medium.

16. The system of claim 15, further comprising a memory to store information from the pixels.